# This Page Is Inserted by IFW Operations and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

### IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.





#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#### In re Application of:

Warren M. Farnworth

**Serial No.:** 10/043,362

Filed: January 9, 2002

For: STEREOLITHOGRAPHIC
METHODS FOR FABRICATING
HERMETIC SEMICONDUCTOR DEVICE
PACKAGES AND SEMICONDUCTOR
DEVICES INCLUDING
STEREOLITHOGRAPHICALLY
FABRICATED HERMETIC PACKAGES

Examiner: D. Zarneke

Group Art Unit: 2827

Attorney Docket No.: 2269-4212.1US

(99-0306.01/US)

NOTICE	OF	<b>EXPRESS</b>	MAILING
--------	----	----------------	---------

Express Mail Mailing Label Number:	EV325771255US
Date of Deposit with USPS:	November 25, 2003
Person making Denosit:	Blake Johnson



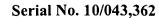
#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicant herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.





#### U.S. Patent Documents

•		
U.S. Patent No.	Publication Date	<u>Patentee</u>
4,769,345	09/06/88	Butt et al.
4,821,151	04/11/89	Pryor et al.
4,866,571	09/12/89	Butt
4,967,260	10/30/90	Butt
5,014,159	05/07/91	Butt
5,323,051	06/21/94	Adams et al.
6,251,488	06/26/01	Miller et al.
6,259,962	07/10/01	Gothait
6,268,584	07/31/01	Keicher et al.
6,337,122	01/08/02	Grigg et al. 28 E
6,391,251	05/21/02	Grigg et al. 28 CEC - RECEIVED
6,482,576	11/19/02	Farnworth et al. E
6,489,007	12/03/02	Grigg et al.
6,524,346	02/25/03	Farnworth 3
6,544,821	04/08/03	Akram
6,544,902	04/08/03	Farnworth
6,549,821	04/15/03	Farnworth et al.
6,562,278	05/13/03	Farnworth et al.
6,585,927	07/01/03	Grigg et al.
6,635,333	10/21/03	Grigg et al.

#### Other Documents

- U.S. Patent Application Publication No. 2002/0098623 A1 to Akram, dated July 25, 2002
- U.S. Patent Application Publication No. 2002/0171177 A1 to Kritchman et al., dated November 21, 2002
- U.S. Patent Application Publication No. 2003/0003180 A1 to Farnworth et al., dated January 2, 2003

- U.S. Patent Application Publication No. 2003/0003380 A1 to Farnworth et al., dated January 2, 2003
- U.S. Patent Application Publication No. 2003/0003405 A1 to Farnworth et al., dated January 2, 2003
- U.S. Patent Application Publication No. 2003/0043360 A1 to Farnworth., dated March 6, 2003
- U.S. Patent Application Publication No. 2003/0068584 A1 to Farnworth et al., dated April 10, 2003
- U.S. Patent Application Publication No. 2003/0072926 A1 to Grigg et al., dated April 17, 2003
- U.S. Patent Application Publication No. 2003/0077418 A1 to Grigg et al., dated April 24, 2003
- U.S. Patent Application Publication No. 2003/0089999 A1 to Akram, dated May 15, 2003
- U.S. Patent Application Publication No. 2003/0092220 A1 to Akram, dated May 15, 2003
- U.S. Patent Application Publication No. 2003/0093173 A1 to Farnworth et al., dated May 15, 2003
- U.S. Patent Application Publication No. 2003/0102566 A1 to Farnworth, dated June 5, 2003
- U.S. Patent Application Publication No. 2003/0151167 A1 to Kritchman et al., dated August 14, 2003
- U.S. Patent Application Publication No. 2003/0201531 A1 to Farnworth et al., dated October 30, 2003
- U.S. Patent Application Publication No. 2003/0203158 A1 to Farnworth et al., dated October 30, 2003
- U.S. Patent Application Publication No. 2003/0207213 A1 to Farnworth, dated November 6, 2003
- MILLER et al., "Maskless Mesoscale Materials Deposition", Deposition Technology, September 2001, pages 20-22
- MILLER, "New Laser-Directed Deposition Technology", Microelectronic Fabrication, August 2001, page 16

- Webpage, Objet Prototyping the Future, Objet FullCure700 Series, 1 page
- Webpage, Objet Prototyping the Future, How it Works, 2 pages
- U.S. Patent Application No. 09/589,841, filed June 8, 2000, entitled "Stereolithographic Methods for Forming a Protective Layer on a Semiconductor Device Substrate and Substrates Including Protective Layers So Formed", inventor Farnworth et al.
- U.S. Patent Application No. 09/651,930, filed August 31, 2000, entitled "Semiconductor Device Including Leads in Communication with Contact Pads Thereof and a Stereolithographically Fabricated Package Substantially Encapsulating the Leads and Methods for Fabricating the Same", inventor Salman Akram
- U.S. Patent Application No. 10/370,755, filed February 20, 2003, entitled "Chip Scale Package Structures and Method of Forming Conductive Bumps Thereon", inventor Warren M. Farnworth
- U.S. Patent Application No. 10/608,749, filed June 26, 2003, entitled "Methods for Labeling Semiconductor Device Components", inventor Grigg et al.
- U.S. Patent Application No. 10/672,098, filed September 26, 2003, entitled "Apparatus and Methods for Use in Stereolithographic Processing of Components and Assemblies", inventor Warren M. Farnworth
- U.S. Patent Application No. 10/690,417, filed October 20, 2003, entitled "Methods of Coating and Singulating Wafers and Chip-Scale Packages Formed Therefrom", inventor Farnworth et al.

Applicant offers to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

This Supplemental Information Disclosure Statement is believed to be filed before the mailing date of the first Office Action on the merits and concurrently with the filing of an RCE in the above-identified application.

Respectfully submitted,

Brick G. Power

Registration No. 38,581 Attorney for Applicant(s)

TRASKBRITT P.O. Box 2550

Salt Lake City, Utah 84110-2550

Telephone: 801-532-1922

Date: November 25, 2003

BGP/sls:djp

Enclosures: Form PTO-1449 or PTO/SB/08

Copy of documents cited

Document in ProLaw

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/043,362

Filing Date January 9, 2002

First Named Inventor Warren M. Farnworth

Group Art Unit 2827

Examiner Name D. Zarneke

	(use as many she	ets as i	necessary)	Examiner Name	D. Zarneke
Sheet	1	of	4	Attorney Docket Number	4212.1US (99-0306.01/US)

	<del></del>	· · · · · · · · · · · · · · · · · · ·	U.S. PATENT D	· · · · · · · · · · · · · · · · · · ·	· - · · · · · · · · · · · · · · · · · ·
Examiner Initials *	Cite No.	Document Number  Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-4,769,345	09/06/88	Butt et al.	
		US-4,821,151	04/11/89	Pryor et al.	
		US-4,866,571	09/12/89	Butt	
		US-4,967,260	10/30/90	Butt	
		US-5,014,159	05/07/91	Butt	·
		US-5,323,051	06/21/94	Adams et al.	<u>-</u>
		US-6,251,488	06/26/01	Miller et al.	
		US- 6,259,962	07/10/01	Gothait	
		US- 6,268,584	07/31/01	Keicher et al.	
		US- 6,337,122	01/08/02	Grigg et al.	
		US- 6,391,251	05/21/02	Keicher et al.	
		US- 6,482,576	11/19/02	Farnworth et al.	
		US- 6,489,007	12/03/02	Grigg et al.	
		US- 6,524,346	02/25/03	Farnworth	
		US- 6,544,821	04/08/03	Akram	
		US- 6,544,902	04/08/03	Farnworth	
		US- 6,549,821	04/15/03	Farnworth et al.	
		US- 6,562,278	05/13/03	Farnworth et al.	
		US- 6,585,927	07/01/03	Grigg et al.	
		US- 6,635,333	10/21/03	Grigg et al.	

		FOREIGN P	ATENT	DOCU	MENTS		,
Examiner Cite	Foreign Patent Document			Name of Patentee or	Pages, Columns, Lines,		
Initials*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)		tion Date D-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
			-				
	-		_			1	
,						· · · · · · · · · · · · · · · · · · ·	
Examiner Signature				Date Consider	red		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional) . <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known Application Number 10/043,362 Filing Date January 9, 2002 First Named Inventor Warren M. Farnworth Group Art Unit 2827 D. Zarneke **Examiner Name** 

(use as many sheets as necessary)

4212 IUS (99-0306 01/US) Attorney Docket Number

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>			
		U.S. Patent Application Publication No. 2002/0098623 A1 to Akram, dated July 25, 2002				
•		U.S. Patent Application Publication No. 2002/0171177 A1 to Kritchman et al., dated November 21, 2002				
		U.S. Patent Application Publication No. 2003/0003180 A1 to Farnworth et al., dated January 2, 2003				
		U.S. Patent Application Publication No. 2003/0003380 A1 to Farnworth et al., dated January 2, 2003				
		U.S. Patent Application Publication No. 2003/0003405 A1 to Farnworth et al., dated January 2, 2003				
		U.S. Patent Application Publication No. 2003/0043360 A1 to Farnworth, dated March 6, 2003				
		U.S. Patent Application Publication No. 2003/0068584 A1 to Farnworth et al., dated April 10, 2003				
		U.S. Patent Application Publication No. 2003/0072926 A1 to Grigg et al., dated April 17, 2003				
		U.S. Patent Application Publication No. 2003/0077418 A1 to Grigg et al., dated April 24, 2003				
		U.S. Patent Application Publication No. 2003/0089999 A1 to Akram, dated May 15, 2003				
		U.S. Patent Application Publication No. 2003/0092220 A1 to Akram, dated May 15, 2003				

Examiner	Date	
Signature	 Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

	Complete if Known
Application Number	10/043,362
Filing Date	January 9, 2002
First Named Inventor	Warren M. Farnworth
Group Art Unit	2827
Examiner Name	D. Zarneke
Attorney Docket Number	4212 1115 (99-0306 01/115)

	·	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т 2
		U.S. Patent Application Publication No. 2003/0093173 A1 to Farnworth et al., dated May 15, 2003	
		U.S. Patent Application Publication No. 2003/0102566 A1 to Farmworth, dated June 5, 2003	
		U.S. Patent Application Publication No. 2003/0151167 A1 to Kritchman et al., dated August 14, 2003	
,		U.S. Patent Application Publication No. 2003/0201531 A1 to Farnworth et al., dated October 30, 2003	
		U.S. Patent Application Publication No. 2003/0203158 A1 to Farmworth et al., dated October 30, 2003	
		U.S. Patent Application Publication No. 2003/0207213 A1 to Farnworth, dated November 6, 2003	
		MILLER et al., "Maskless Mesoscale Materials Deposition", Deposition Technology, September 2001, pages 20-22	
		MILLER, "New Laser-Directed Deposition Technology", Microelectronic Fabrication, August 2001, page 16	
		Webpage, Objet Prototyping the Future, Objet FullCure700 Series, 1 page	
		Webpage, Objet Prototyping the Future, How it Works, 2 pages	
		U.S. Patent Application No. 09/589,841, filed June 8, 2000, entitled "Stereolithographic Methods for Forming a Protective Layer on a Semiconductor Device Substrate and Substrates Including Protective Layers So-Formed", inventor Farnworth et al.	

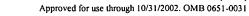
$\overline{}$		
Examiner	Date	
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				Complete if Known		
TAIT		AT TAT	COLOCUDE	Application Number	10/043,362	
INFORMATION DISCLOSURE				Filing Date	January 9, 2002	
STA	STATEMENT BY APPLICANT		First Named Inventor	Warren M. Farnworth		
				Group Art Unit	2827	
	(use as many s	heets as i	necessary)	Examiner Name	D. Zarneke	
Sheet	4	Of	4	Attorney Docket Number	4212 IUS (99-0306 01/US)	

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	1			
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
		U.S. Patent Application No. 09/651,930, filed August 31, 2000, entitled "Semiconductor Device Including Leads in Communication with Contact Pads Thereof and a Stereolithographically Fabricated Package Substantially Encapsulating the Leads and Methods for Fabricating the Same", inventor Salman Akram				
		U.S. Patent Application No. 10/370,755, filed February 20, 2003, entitled "Chip Scale Package Structures and Method of Forming Conductive Bumps Thereon", inventor Warren M. Farnworth				
		U.S. Patent Application No. 10/608,749, filed June 26, 2003, entitled "Methods for Labeling Semiconductor Device Components", inventor Grigg et al.				
		U.S. Patent Application No. 10/672,098, filed September 26, 2003, entitled "Apparatus and Methods for Use in Stereolithographic Processing of Components and Assemblies", inventor Warren M. Farnworth				
		U.S. Patent Application No. 10/690,417, filed October 20, 2003, entitled "Methods of Coating and Singulating Wafers and Chip-Scale Packages Formed Therefrom", inventor Farnworth et al.				
		TC 2	3			
		C 2800 MAIL ROOM	701			
			2011-3			
		ROOI	ند			

Examiner	Date	
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.